

Group Art Unit: 3677 )  
Examiner: Jeffrey Sharp )  
Inventor: Ramasamy, et al. )  
Serial No: 10/698,961 )  
Filed: October 23, 2003 )  
For: BREAK AWAY FASTENING SYSTEM )  
Attorney Docket No: 0275M-000666/COB )

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**DECLARATION OF  
CARY MELOCHE**

I, Cary Meloche, hereby declare the following to be true and accurate, to the best of my personal knowledge:

1. I am a Product Manager for the weld studs at Emhart Teknologies, Inc. I am employed by Emhart Teknologies, Inc which is a related company to the owner of the above identified patent application.

2. Emhart Teknologies, Inc. has now sold approximately 12,500,000 ring weld studs to-date in the North American automotive industry.

3. Emhart Teknologies, Inc. has approximately 70% of the weld stud market share in the North American automotive industry.

4. The Emhart Teknologies, Inc. price to customers for the ring weld studs increased compared to the product it replaced.

5. The Emhart Teknologies, Inc. ring weld stud is technically advantageous over a shouldered weld stud, since the Emhart Teknologies, Inc. ring weld stud: (a) can be welded to thin gauged sheet metals and sheet metal


without having a head portion that stands too proud from the weld surface (by way of example and not limitation); and (b) provides greatly increased machine manufacturing tolerances without an increasing occurrence of burn through failures (by way of example and not limitation) while meeting strict torque and pullout load requirements.

6. It is my understanding and belief, from my conversations with customers, that the great commercial success of the Emhart Teknologies, Inc. ring weld stud is primarily based on the technical features thereof and not significantly based on marketing, advertising or pricing.

7. Each of the Emhart Teknologies, Inc. ring weld studs referenced herein employs at least the items listed in the attached claims which I understand are pending in the above identified U.S. patent application.

8. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on my understanding and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 10-7-05

  
Cary Meloche

U.S. Patent Application Serial No. 10/698,961  
Attorney Docket No. 0275M-000666/COB

INDEPENDENT CLAIMS FROM U.S. SERIAL NO. 10/698,961

1. A weldable fastener comprising:
  - a fastener head having a first head thickness; and
  - an annular weldment area having a second head thickness, said second head thickness being less than 50% the first head thickness.
  
8. A stud to structure construction comprising:
  - a weldable fastener having a member with a first thickness and an annular weldment area having a second thickness which is less than 50% the first thickness; and
  - an annular weldment disposed between and coupling the weldable fastener to the structure.
  
18. The stud to structure construction comprising:
  - a metal laminate comprising a polymer layer;
  - a fastener head having a first head thickness and a web portion;
  - an annular weldment area having a second head thickness, said second head thickness being less than the first head thickness, said annular weldment area having a first exterior radius amid said head has an exterior wall having a second exterior radius equal to the first exterior radius;
  - a solid cylindrical shank having an exterior surface, a portion of the exterior surface being threaded;

an annular weldment disposed between and coupling the weldable fastener to the metal laminate; wherein the shank has a first failure load, and the web has a second failure load greater than the first failure load and wherein the annular weldment has a third failure load great than the first failure load, wherein the weldment is partially disposed between the first and second metallic layers wherein the polymer layer is within the annular weldment area to laminate interface and wherein the polymer layer couples the first and second metallic layers.

23. A weld fastener comprising:

a longitudinally elongated shank;

a laterally enlarged head extending from an end of the shank

having a head thickness; and

a substantially annular section longitudinally extending from the head opposite the shank, said annular section having a thickness which is less than 50% of the head thickness; and

wherein a welding edge of the annular section is substantially flat along a lateral plane substantially parallel to a lateral plane of the head, prior to welding.

31. An automotive vehicle apparatus comprising:  
a laminate panel; and  
a ring stud arc welded to the laminate panel, wherein the ring stud is welded to the laminate panel by an annular weldment area, wherein the a ring stud has a head with a first thickness and an annular weldment area having a second thickness which is less than 50% the first thickness.

42. An automotive vehicle apparatus comprising:  
a ring stud arc welded to a laminate panel, wherein the ring stud is welded to the laminate panel by an annular weldment area and wherein the laminate comprises first and second metallic layers, a polymer layer being disposed between the first and second layers.